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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/374,344	08/13/1999	MAKOTO HAYAKAWA	628365009012	3620

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EXAMINER

PADGETT, MARIANNE L

ART UNIT PAPER NUMBER

1762

DATE MAILED: 01/30/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/374,344

Applicant(s)

Hayakawa et al

Examiner

M.L. Padgett

Group Art Unit

1762

A9-21

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 10/17/02

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 301, 303-312, 314-329 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 301, 303-312, 314-329 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☒ Certified copies of the priority documents have been received in Application No. 09/129,754.

☐ Copies of the certified copies of the priority documents have been received

in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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1. Claims 301, 303-312, 314-329 are objected to or rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In paper # 18, section 3, claim 301 and 312, were "object to" as opposed to rejected, because while they are formally incorrect (wrong use of articles or contradictory language), they do not prevent one from understanding the intended meaning of the claims. The examiner is well aware that "less than about" is commonly used, but some supervisors have considered it an error not to reject it, and others ignore it. How the phrase is contradictory has already been satisfactorily explained, and if applicant can not understand how "less than" excludes number greater than a set value, while "about" contradicts it by including some of them, there is not much else the examiner can say. Since it is an objection, it is entirely up to applicant whether or not they amend the phrasing to be formally correct, or leave it as is, and will not effect allowance or lack thereof.

With respect to claims 308 and 320 as rejected under 112 ¶2 in paper # 19, applicant's response (p. 3-4) indicates that they are either unable or unwilling to explain how the limitations of these claims can possibly make any sense with respect to limitations already required in the independent claim, as there are no apparent means for a generic protective coat to magically transfer the properties (hydrophilic) of the layer they cover to their own surface. Further review of the specification appears to indicate that this is because there is no support or enablement for such an ability. Original claims 15, 16 or 80 have protective layers that are hydrophilic, or made hydrophilic or photocatalytic, but none that are generic and somehow manage to transfer the properties of the layer they are covering to their surface. Applicants' response thus appears to

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demonstrate that it wasn't simply poor or careless phrasing of these claims, but appears to be New Matter/lack of enablement and broader than the scope of the enabling invention. The jumbo 82 page⁺ claims specification is too large to have checked in greater detail for the enablement/explanation of intent of these claims.

It is impossible to determine what humidity will induce fogging on an unspecified substrate material of claim 301 as it will vary with type of material, its surface morphology, etc. Where in the jumbo specification is the humidity defined by this criteria?

2. Claims 301, 303-312 and 314-329 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

See above uncertainty discussions for phrasing that may include New Matter that lacks support and enablement. Also with respect to claim 312, while washing away of, for example "fatty dirt and contaminates" as tested in the abstract, is supported by the specification, support for washing away of any kind of deposit was not found for either the photoexcited surface layer or for the generic protective layer. The vary broad "deposits" is broader than the scope of the enabling disclosure that has been found by the examiner, hence until shown otherwise is considered to include New Matter.

3. Claims 301, 303-312 and 314-329 remain rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 54-58, 64-68, 71-72, 91-99 and 102-131 of U.S. Patent No. 6,013,372. Although the conflicting claims are not

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identical, they are not patentably distinct from each other because of reasons given in section 6 of paper # 18. ¹⁹

Applicant's willingness to submit the terminal disclaimer as stated on p. 4 of the 10/17/02 response, is noted, but the rejection must be maintained until the disclaimer is received or the rejection otherwise removed.

4. Claims 301, 303-306, 308-312, 314-318, 320-321, 323-324, 326 and 329 are rejected under 35 U.S.C. 103(a) as being unpatentable over Field et al, alone in view of Hiroshi Okaniwa et al as stated in section 7 of paper # 18. ¹⁹

Note aqueous development washes away material from parts deposited.

5. Claims 307, 319 and 322 are rejected under 35 U.S.C. 103(a) as being unpatentable over Field et al as applied to claims 310, 303-306, 08-312, 314-318, 320-321, 323-324 and 329 above, and further in view of Ogawa et al (EP, '477) as stated in section 8 of paper # 18. ¹⁹

6. Claims 301, 305-307, 309, 312, 317-319, 324 and 327 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murasawa et al (823), alone or in view of Hiroshi Okaniwa et al as applied in section 9 of paper # 18.

Note walls are periodically washed, depending ⁹in domestic cleanliness standards, and humidity varies by location of use, weather, etc ...

7. Claims 301, 305-307, 309, 312, 317-319, 322, 324 and 327 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heller et al, alone or in view of Hiroshi Okaniwa et al as applied in paper # 18, section 10.

8. Claims 301, 303-305, 309, 312, 314-317, 322, 325 and 328 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nissan Motor Co., LTD. ((157) or (158)) or Toyota Motor Corp (Suzuki et al), alone or in view of Hiroshi as applied in section 11 of paper #18. ¹⁹

9. Claims 301, 303-305, 309-312, 314-317, 321-323, 325-326 and 328-329 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukayama et al, alone or in view of Hiroshi as applies in section 13 of paper #18. ¹⁹

10. Applicant's arguments filed 10/22/02 have been fully considered but they are not persuasive.

The amendments to the claims do not make any significant differences in the claims, because they constitute acts or occurrences which will take place in normal usage of the products produced by the processes of the references, such as windows and walls being periodically washed, days or weather being foggy or humide, etc. A person need not supply the humidity, the natural occurrence of the condition is sufficient, and if it may be subjected to claimed conditions in normal or conventional usage, that is sufficient to read on the claims as written.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

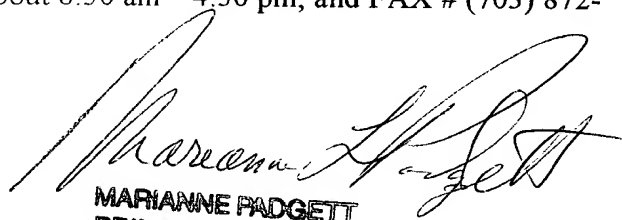
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication should be directed to M L. Padgett at telephone number 703-308-2336 on M-F from about 8:30 am – 4:30 pm; and FAX # (703) 872-9311 (after final); or 305-6078 (informal).

M. L. Padgett/mn 1/23/03
January 29, 2003



MARIANNE PADGETT
PRIMARY EXAMINER

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